PANEL 2A -- GOVERNMENT CAPABILITIES, SERVICES, AND INITIATIVES

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Rapporteurs: Mr. Michael Tomlinson, Department of Commerce,
National Weather Service (DOC/NWS)
Ms. Charlene Wilder, Department of Transportation,
Federal Transit Administration (DOT/FTA)

Panelists: Mr. Gregory Mandt, Department of Commerce,
National Weather Service (DOC/NWS)
Lt Col Gerald Borger, Department of Defense,
United States Transportation Command (USTRANSCOM)
Mr. Lewis Moore, Department of the Interior,
Bureau of Reclamation (DOI/BuREC)
Mr. John Gambel, Federal Emergency Management Agency
(FEMA)

Objective: (a) Provide an update on current Government capabilities and services.
(b) Describe any near-term initiatives for enhanced capabilities and services as they relate or apply to the four surface transportation modes.

Synopsis

Department of Commerce

The National Weather Service (NWS) has recently completed its modernization and associated restructuring. There are now 121 weather offices located across the Nation with updated equipment and facilities to serve the public and the surface transportation sector. The NWS has begun the task of modernizing its products and services and the evolving infrastructure to support these new capabilities. There are plans for partnering with the private sector and to explore future roles and responsibilities. Rapid prototyping sites and developing and testing higher resolution models are two examples of NWS initiatives to use technological capabilities to better serve the surface transportation community. Weather Forecast Offices are encouraged to work with State DOT's to meet surface transportation needs.

Department of Defense

The Department of Defense (DOD) has a considerable environmental capability with a scope that encompasses support for military operations worldwide. The Navy's focus is primarily over and under open oceans and littoral regions, while the Air Force emphasizes air operations. However, both offer products to DOD and government activities that provide valuable information for surface transportation planners, operators, and travelers. Future events that will enhance DOD capabilities include implementation of a Land-Surface model to improve the boundary physics over land.

The launch of a new satellite in January 2001 should improve characterization of surface parameters, such as snow, ice, soil moisture, etc. DOD capabilities can be leveraged directly by NWS and can be made available to state DOTs.

Department of the Interior

Federal lands located in all 50 states and which comprise about one-third of the Nation's surface are popular destinations for well over a billion visitors each year. Tourists and local visitors travel to campgrounds, lakes, recreational areas, national seashores, wilderness areas, national forests, and national parks. In some cases, these tourists and visitors utilize surface transportation for hundreds or even thousands of miles to reach their destinations. Frequently, these journeys take the traveler through sparsely populated areas and over rough terrain which may not have access to reliable weather broadcasts or cellular phone service. The possibility of adverse weather development and/or exposure to dangerous conditions in the event of transportation equipment failures should be emphasized. These adverse conditions are particularly important in the Western United States where federal land constitutes 40 percent or more of the area within the eight states.

Several new technologies may be employed to improve safety on public lands. These technologies include remote Internet access, NOAA weather radios in vehicles, collision and rollover transponders--for locating accident victims, and other prospective satellite communication capabilities and services for travelers. Since not all vehicles will be equipped with these advanced devices, the use of rudimentary advisories, such as signs and other effective communications media, will still be required. A comprehensive suite of weather information should help sensitize travelers to potential weather hazards, aid them in finding emergency shelter when required, and could be effective in avoiding future weather-related casualties.

Federal Emergency Management

Weather information cuts across all facets of emergency management including preparedness, response, recovery, and mitigation. Emergency management decision-makers must have weather information in a format readily useable for their activities. Initiatives in support of emergency management include the location and operation of a hurricane liaison team (HLT) at the National Hurricane Center. The HLT assists in coordinating information tailored for hurricane evacuations as well as for preparations and responses to inland flooding and strong winds. Hurricane Floyd emphasized the need for emergency management agencies and the state transportation agencies to work more closely together in support of disaster-related evacuations. Both communities have common goals and needs with regard to the use of weather information in decision-making.

The Federal Emergency Management Agency (FEMA) has also developed a national risk assessment and loss estimate tool to assist planners and managers in areas, especially in coastal areas. In the future, FEMA will focus more effort on improvements in forecasting hurricane intensity, tracking and landfall, inland flooding, wind and wind-borne debris, and coastal flooding and erosion.

Follow-up Discussions

Discussions centered on the need to enhance private/public partnerships especially in regards to working on road weather data issues. Data sharing is a key partnering opportunity as a means of improving numerical models and specifically for high-resolution models. In the future, as part of their headquarters reorganization, the NWS will begin to consider observations as a service rather than just data. Consistent with this approach, the NWS will also address data access and quality as well as data basing of available mesonet data. With this *metadata* being available to those who will access the data, the user must decide as to how the data will be used in their applications.

Although sensor siting is a quality assurance concern, chances are not promising that all data will meet and be in compliance with each of the established standards that are currently in existence throughout the meteorological community. The approach currently being used by the aviation meteorology community is also applicable and appropriate for the sharing and use of road weather observations. Basically, only those data that meet established standards and comply with current practices will be accepted, disseminated, and shared among the user community.

Links to Presentations:

Mr. Gregory Mandt, DOC/NWS
www.ofcm.gov/WistII/Presentations/Day1/6_Panel2A/Mandt.ppt

Lt Col Gerald Borger, USTRANSCOM
www.ofcm.gov/WistII/Presentations/Day1/6_Panel2A/Borger.ppt

Mr. Lewis Moore, DOI/BuREC
www.ofcm.gov/WistII/Presentations/Day1/6_Panel2A/Moore.ppt

Discussions also focused on the relationship between public and private meteorological service providers. The NWS is

NV DOT—NWS WFO working with DOT; VAMS work with DOT; WFO reluctant to get involved due to conflict with VAMS;

The NWS and FHWA are working together at WFO and regional levels; AASHTO – Arizona DOT and NWS need to share their experience in

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- Public and private issues; what is vehicle to bring together these groups; aviation services branch—modernized products
- Access to military government weather sources.
- Enhancements to MM5 are equally shared among the government and research communities.

RWIS designed for DOT and not for meteorological community;